

## **II. Amendments to the Claims**

Cancel all claims of record, Claims 1 – 9, and substitute new Claims 10 – 21. The following listing of claims replaces all prior versions and listings of claims in this application. The amended claims are filed in order to more precisely and concisely claim subject matter in the application to which the Applicant is entitled to obtain letters patent.

The total number of claims now pending is now 12, and the total number of independent claims now pending is now 1. No adjustment in the filing fee is necessitated by these amendments.

### **III. Listing of the Claims**

#### **Claims 1 – 9 (cancelled)**

#### **Claim 10 (new)**

A pulse combustor, comprising:

- a) a first outer plate comprising a central hub;
- b) a second outer plate comprising an annular hub;
- c) a plurality of intermediate plates located between said first outer plate and said second outer plate, said intermediate plates being spaced apart to form tailpipe regions therebetween and between said outer plates and adjacent ones of said intermediate plates;
- d) a combustion chamber; and,
- e) a burner coupled to said annular hub, said burner operative to ignite a fuel/air mixture in said combustion chamber,

wherein at least one of said intermediate plates has at least one coolant passageway therein for conducting coolant to through said intermediate plate.

#### **Claim 11 (new)**

A pulse combustor according to Claim 10 wherein at least one of said first outer plate and said second outer plate has at least one coolant passageway therein for conducting coolant through said outer plate.

**Claim 12 (new)**

A pulse combustor according to claim 10, wherein said intermediate plates are spaced apart so as to provide equal resistance to gas flow between each set of adjacent plates.

**Claim 13 (new)**

A pulse combustor according to claim 10, wherein said intermediate plates are circular.

**Claim 14 (new)**

A pulse combustor according to claim 13, wherein each of said intermediate plates is formed by a flat coil of hollow tubing.

**Claim 15 (new)**

A pulse combustor according to Claim 14, wherein said hollow tubing is stainless steel.

**Claim 16 (new)**

A pulse combustor according to Claim 14 wherein said coolant passageway in at least one of said intermediate plates has a coolant inlet at the periphery of said coil.

**Claim 17 (new)**

A pulse combustor according to Claim 14 wherein said coolant passageway in at least one of said intermediate plates has a coolant outlet adjacent the center of said coil.

**Claim 18 (new)**

A pulse combustor according to Claim 10, further comprising spacers between each pair of adjacent said plates to set the separation between said plates.

**Claim 19 (new)**

A pulse combustor according to Claim 10 wherein said burner further comprises a cylinder having an open end and a closed end.

**Claim 20 (new)**

A pulse combustor according to Claim 19 wherein said burner further comprises a cone mounted in said cylinder with the base of said cone adjacent said closed end of said cylinder.

**Claim 21 (new)**

A pulse combustor according to Claim 19, wherein said burner further comprises:

- (a) a plurality of radially spaced apart elongated slots extending along a length of the surface of said cylinder; and,
- (b) a plurality of elongated nozzle assemblies with each of said nozzle assemblies affixed to the surface of said cylinder over one of said slots, and each of said nozzle assemblies having i) nozzle openings spaced along its length and ii) a plenum accessing said nozzle openings.

#### IV. Amendments to the Figures

The following drawing amendments are being requested in this paper.

1. Figures 2A and 2B - correction of reference numeral **40** to read **45**.
2. Figure 4A - removal of extraneous reference numerals **33, 25, 38, 35, 37**, and correction of reference numerals **29** to read **25**, and **40** to read **45**.
3. Figure 8C - correction of reference numeral **52** to read **55**.

The Appendix includes a formal request for amendments to the figures, clean replacement sheets for the effected figures, and mark-up sheets for the effected figures.